

EMPLOYEES/LEADERSHIP IN THE COMMUNITY

ECUA'S QUENCH BUGGY GENERATES SMILES AND FUN THROUGHOUT THE COMMUNITY









Blue Angels' Homecoming Air Show — Like the Blue Angels, the ECUA's Quench Buggy has become a welcome sight at so many local events. In 2020, the Quench Buggy was the central spot for fresh water, whether at a marathon on Pensacola Beach, downtown Pensacola for Pawpalooza, or aboard NAS Pensacola with the Blue Angels. Looks like our Quench Buggy is ready for take-off!



Girl Scouts Visit the Escambia County Wildlife Refuge — ECUA's Quench Buggy and public information staff were on hand to distribute award-winning, freshly chilled water and information on recycling, fats, oils, and grease (FOG), flushable wipes, composting, and the elimination of sanitary sewer overflows.



Carnival for a Cure — It was our extreme pleasure to be a part of Carnival for a Cure, a partnership between the Fishbein Foundation and Rally Pensacola, dedicated to increasing awareness of childhood cancer and raising proceeds towards the fight. Carnival for a Cure is held during Childhood Cancer Awareness month each year in September at Community Maritime Park.

'From the Ground Up' Community Garden — Enjoying a beautiful day at 'From the Ground Up' Community Garden while cultivating friendships and sharing educational materials.

PawPalooza — Our furry friends are always eager to lap up a refreshing sip of ECUA water, as their humans lap up information on recycling, water conservation, and so much more!

Employees in the Community — ECUA is committed to making a positive difference and improving the quality of life in our community. Our employees selflessly contribute their time, resources, and talents to many charitable efforts annually.

Events and Organizations the ECUA employees support include:

- American Red Cross and OneBlood Blood Drives
- American Cancer Society's Making Strides Against Breast Cancer Walk
- Sacred Heart Children's Foundation
- United Way

- Youth LEAP (Leadership Pensacola)
- Boys and Girls Club of Escambia County
- Greater Pensacola Society for Human Resource Management Spirit of Giving Event
- Disabilities Summit Council
- Gulf Coast Diplomacy Council

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EXECUTIVE DIRECTOR'S MESSAGE



2020 brought both difficulties and change. I am proud to say that through the following events, the ECUA employees demonstrated their dedication to customer service, their exceptional training and problem solving skills, and support for the policy and administrative leadership of the organization.

The 2020 fiscal year was the Emerald Coast Utilities Authority's 38th year of operations, providing exceptional quality water and wastewater utility services to customers throughout Escambia County. Services expanded when the ECUA added solid waste collection services in 1992, curbside recycling in 2009, and the Materials Recovery Facility went into operation in 2016.

COVID-19

2020 was a unique and challenging year due to the global pandemic. Its impact on individuals, families, businesses and economy was unprecedented. The first six months of the pandemic took its biggest toll. The ECUA Board took two important and immediate steps in response. First, for three months during summer, there was a moratorium on disconnects due to late or unpaid utility bills, knowing the many financial hardships facing our customers. We also worked with area charities to identify financial assistance, when applicable. Second, for fiscal year 2021 the Board also chose not to raise rates for water and wastewater services.

Hurricane Sally

On September 16th Hurricane Sally stalled in the Gulf, then took an unexpected turn, making landfall on Perdido Key as a category two hurricane. While the winds brought significant damage to many

homes and businesses in parts of our service area, the more widespread damage occurred due to 24 inches of rain that fell as the slow-moving hurricane passed by.

ECUA employees did tremendous work the night of the event and the days that followed. Loss of electrical power meant that crews were operating generators and temporary pumping equipment while waiting for electric service to be restored. Numerous waterline repairs were necessary due to damage from uprooted trees that pulled up buried waterlines when they blew over.

Once waterlines were back in service, the quality control testing staff completed a sample and testing schedule in two, very intense days. This is work that normally takes place over one month, and could not have occurred without the additional assistance of the Escambia County Sheriff's office who provided escorts to the hundreds of sampling locations. This allowed ECUA to remove the system-wide precautionary boil water notice that had been in effect as expeditiously as possible, helping our community return to normal.

The materials recycling facility (MRF) was also extensively damaged when a door failure allowed hurricane force winds into the structure, resulting in over \$3 million in damage. However, ECUA staff and its contractor were able to repair and replace the damage and have the MRF back in operations within only six weeks.

Changes in Leadership

In November 2020 two new members joined the ECUA Board. Our thanks to Dr. Cedric Alexander and Dr. Larry Walker for their dedication and policy leadership during their tenure on the Board.

Executive Director Steve Sorrell retired after 17 years of service to the ECUA. Bill Johnson graciously returned from retirement for part of the year to be interim executive director, and in May 2020, I was given the honor of being appointed the next executive director of this outstanding organization. I look forward to working with the dedicated workforce as we continue to apply the latest technologies to provide safe, efficient and cost-effective water, wastewater, solid waste and recycling services for you.

In 2020 the ECUA also entered into a five year grant award agreement for expanding the distribution system for reclaimed water on Pensacola Beach to be used for irrigation.

Despite the challenges of 2020, the ECUA continued its environmental stewardship of investing in the replacement of aging infrastructure to increase their reliability, reduction of inflow and infiltration through projects like lining the collection system, and providing award-winning advanced wastewater treatment compliance.

Thank you for being an ECUA customer and for your support of this publicly owned and operated utility system.

J. Bruce Woody, P.E., M.P.A. Executive Director

ECUA BOARD

The five elected members of the ECUA Board are charged with formulating and adopting policies, procedures, rules and regulations, including the setting of consumer rates necessary for the ownership, management, operation, and maintenance of ECUA's utility systems.

Each Board member is elected from one of Escambia County's five electoral districts and serves a four-year term. Terms are staggered, with elections taking place at two-year intervals. Representatives of districts one, three, and five are elected in the same cycle while representatives from districts two and four are elected in the alternate election cycle.

The Board's business is conducted at monthly public meetings scheduled on a regular basis and held in the boardroom of the Emergency Operations Support Addition on the ECUA's Ellyson Industrial Park campus, located at 9255 Sturdevant Street, Pensacola. ECUA Board members may be contacted through the information listed on this page or by contacting Ms. Amanda Miller, Administrative Coordinator, at (850) 969-3302.



MS. VICKI H. CAMPBELL
District One • (850) 449-1196
vicki.campbell@ecua.fl.gov
Term expires 11/2024



MS. LOIS BENSON ● Chairman District Two ● (850) 221-4404 lois.benson@ecua.fl.gov Term expires 11/2022



DR. CEDRIC L. ALEXANDER District Three • (214) 300-8555 cedric.alexander@ecua.fl.gov Term expired 11/2020



MR. LARRY WILLIAMS
District Three • (850) 292-7139
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Elected 11/2020 • Term expires 11/2024



MR. DALE PERKINS
District Four ● (850) 207-5826
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DR. LARRY N. WALKER ● Vice-Chairman District Five ● (850) 723-6094 larry.walker@ecua.fl.gov Term expired 11/2020



MR. KEVIN STEPHENS ● Vice-Chairman District Five ● (850) 380-3431 kevin.stephens@ecua.fl.gov Elected 11/2020 ● Term expires 11/2024 For the thirty-second year in a row, we received the certificate of achievement for excellence in financial reporting.

Certificate of Achievement for Excellence in Financial Reporting

For the thirty-second year in a row, we received the Certificate of Achievement for Excellence in Financial Reporting from the Government Finance Officers Association (GFOA) for our Comprehensive Annual Financial Report (CAFR) for the year ended September 30, 2019. GFOA sets the standards for governmental financial reporting, and this award is likened to the Good Housekeeping Seal of Approval. This certificate recognizes conformance with the highest standards for preparation of state and local government financial reports. In order to receive this award, a government must publish an easily readable and efficiently organized CAFR, which must satisfy other generally accepted accounting principles and applicable legal requirements. In addition to the audited financial statements, this report provides historical information on the ECUA for revenues, expenses, the numbers of customers, volume of water pumped, and various other data for the last ten years. It also provides a summary of major organization accomplishments for that year and identifies future goals and long-term financial planning.



Purchasing Card Program

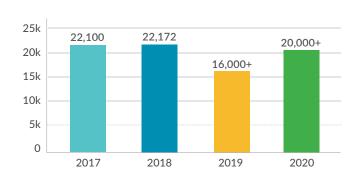
The Purchasing (VISA) Card Program completed its seventeenth full year of company-wide usage. There are currently 208 Visa Cards issued to ECUA employees. These cards allow employees to purchase items costing \$2,499 or less, and are a more cost-effective method of making small-dollar purchases. The purchasing card usage allows us to avoid certain costs associated with issuing purchase orders and processing checks for payment through the accounts payable process. Total purchases using the VISA card for the fiscal year equaled approximately \$2.4 million. The VISA card program provides a modest rebate to ECUA based on the total dollar volume purchased during the year. In fiscal 2020, ECUA received a rebate of \$26,702.

Department Statistics

In fiscal year 2020, the Accounts Payable Division processed over 20,000 invoices for payment; the number of vendors paid electronically increased by 2%. The Purchasing & Stores Division prepared and processed 1,525 regular purchase orders, 274 blanket purchase orders, 47 emergency purchase orders, 39 contract extensions, 17 formal bids, and 10 construction bids. Payroll processed 107 new employees, six (6) employees entered the DROP program, and 96 employees left ECUA's employment with 13 of them retiring. The Central Warehouse processed 16,090 issue tickets with a total value of \$2.6 million. The value of the inventory on hand at September 30 was \$1,452,044. The number of electronic payments received increased over last year by 7.3%. This allows us to receive payments in a more timely manner, with fewer paper-handling costs associated with the processing of paper checks.

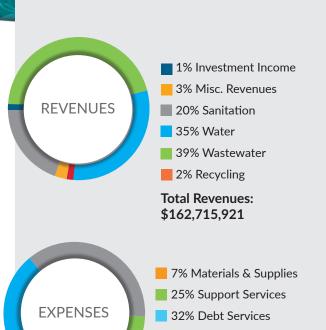
The number of customers receiving electronic bills increased 11.7%, thus saving on the cost of printing a paper bill and postage.

In 2020, the Accounts Payable Division processed over 20,000 invoices for payment.



Enterprise Resource Planning System (ERP)

ECUA implemented the new ERP system's Financial Module on October 1, 2019, with the beginning of our fiscal year. In preparation for the implementation of the Human Capital Management (HCM) and the Enterprise Asset Management (EAM) modules, Phase 2, we spent many hours over the last 12 months identifying the data and information we want to convert from the legacy system into the new system. These data included converting the work order files, asset records and related maintenance records, employee demographic data, and payroll history records. There is still more work to be done in order to be ready for the "go-live" of those two modules, and to reach our target date of January 2021. Our various departmental staff members deserve recognition and ECUA's gratitude for their involvement in the implementation process, their dedication during the many long hours of validating data, attending multiple training sessions, and most importantly, adapting to new processes and procedures as we learn to streamline the flow of paperwork through electronic workflow. We applaud the end-users throughout the ECUA departments for their participation in attending multiple training sessions and learning the new processes. The new system allows for better functionality and ease of use for all involved.

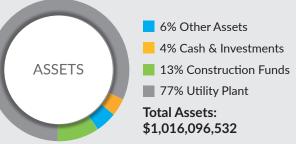


■ 36% Personal Services

Total Expenses:

\$142,414,758





Sewer Expansion Program

Early in 2020, the Beach Haven NE Phase 1 (area north of Gulf Beach Highway between Mills Avenue and Decatur Avenue) project with Escambia County was completed, providing connections for approximately 378 new customers. In FY 2020, the ECUA managed the design efforts for the following projects: Navy Point Phase 4A, Airway Drive/Stockdale Avenue Area, Lee Street ("T" Street to Kirk Street), and Beach Haven NE Phase 2. Combined, these projects will add connections for approximately 825 new customers. ECUA staff designed and developed plans for both the River Gardens and the Miramar Drive Sewer Expansions. All of these projects, with the exception of Airway Drive/Stockdale Avenue, are anticipated to start construction in FY 2021.

ECUA received a \$250,000
grant from the Florida
Department of Environmental
Protection (FDEP), which will be
used for the construction of a
phased sewer expansion effort in
the Brownsville Community.

Water Service Renewals

The Engineering Department managed ECUA's continuing commitment to replacing water service lines within the system, which began several years ago in an effort to eliminate high maintenance costs caused by failing polybutylene service tubing. In 2020, we replaced approximately 750 services in eight project locations under an existing annual contract, extended for another year to allow ECUA to capitalize on favorable unit prices for construction. ECUA staff has developed plans for additional locations that are experiencing frequent service line breaks, with approximately 850 services identified for replacement in 2021. This work is anticipated to be completed in FY 2021.

Key Projects of Interest: Innerarity Island Sewer Project and Cantonment Force Main Project

The Cantonment Trunk Force Main Upgrade Project involved replacing nearly 10,500 feet of existing six-inch and eight-inch force main with larger diameter force main to alleviate a bottleneck in the transmission of sewage from the Well Line Road Lift Station. Together with the soon-to-be completed replacement of the Well Line Road Lift Station (LS143), the force main upgrade will provide a much-needed sewer capacity increase for the Cantonment area. The construction cost for the project is approximately \$1.1M.



Antiquated Water Line Upgrades

To ensure optimal service to our customers, ECUA staff designed and managed construction on two projects to upgrade or replace existing older water mains. These two projects are the Wyndotte Road, Euclid Street and Kersey Road Project (approximately 4,000 linear feet), and Intendencia Street — Romana Street Project (approximately 4,500 linear feet). ECUA staff have started design efforts for the production of construction plans to replace approximately 3,000 linear feet of existing water mains in the vicinity of Corrine Jones Park. In addition, ECUA staff are currently surveying the Scenic Hills Country Club area for the development of construction plans. The project in Scenic Hills, consisting of approximately 4 miles of piping, will be completed in two phases. Phase 1 construction will begin in mid to late 2021.

Patton Drive LS 120

The replacement of Patton Drive Lift Station (LS120) was completed in 2020. This lift station supports the Beach Haven sewer expansion area, and the project included the relocation of approximately one half-mile of 24-inch diameter gravity sanitary sewer main from Jones Creek/Swamp to reduce inflow and infiltration and provide for better access for system maintenance during inclement weather.

The ECUA staff successfully completed the first year of the Corrective Action Plan (CAP), investing \$10.1 million in sanitary sewer collection system infrastructure improvements.

Sanitary Sewer Overflow (SSO) Amended Consent Order

The Amended Consent Order (ACO) negotiated with the Florida Department of Environmental Protection (FDEP) to establish a 10-year period to complete approximately \$100 million in wastewater infrastructure-related projects beginning October 1, 2019. The CAP provides details of the sanitary sewer overflow (SSO) reduction program through March of FY2029 and is focused in four areas: additional system storage, sewer basin rehabilitation and improvements, lift station repair and replacement, and force main replacement. The CAP was approved by FDEP in late December 2019.

This year, the number of SSOs was trending in an optimistically low level until Hurricane Sally struck in September 2020. The hurricane's ensuing flooding and power outages heavily impacted our sanitary sewer collection system and ECUA sustained 92 SSOs during and after the hurricane. Outside of Hurricane Sally, ECUA had 47 recorded spills in 2020, for an annual total of 139 SSOs.



Long-term Flow Monitoring

Two of the key components to reducing SSOs in the ECUA collection system are sewer rehabilitation and sewer replacement. The amount of Inflow and Infiltration (I&I) identified in any given sewer basin is a strong indicator of existing problems, and provides valuable guidance in deciding between undertaking rehabilitation versus replacement efforts within the sanitary sewer collection system. Several years ago, ECUA purchased and installed 14 flow monitors and four rain gauges for long-term collection of sewer flow data. The results of the flow monitoring will assist in the measurement of I&I and will be useful in other ways, such as:

- Prioritizing sewer rehabilitation, making the I&I reduction program more efficient.
- Aiding in measuring the effectiveness of sewer rehabilitation efforts.
- Aiding in calibrating the sewer system hydraulic model and determining the appropriate sewer capacity.
- Providing flow data during different weather and tidal conditions.
- Demonstrating the reduction in I&I in response to the FDEP Consent Order.

The Manhole Liquid Level Monitoring Program began in early 2020 with the mounting of 20 Liquid Level Monitors. These monitors were placed in strategically-selected manholes, to provide an early warning of potential SSOs, to track and record I&I influences in specific locations, and to evaluate the effectiveness of gravity sewer mains that had previously been rehabilitated, and identify basin areas on which to focus the private side lateral programs. The monitors recorded liquid levels every 15 minutes and sent alarms via email and text message to staff when a certain liquid level threshold was met (75% of manhole height). The findings and data showed remaining I&I areas and contributed to prioritizing the sewer basins to begin the Private Side Lateral Program.

Annual Sewer Rehabilitation and Inspection Contracts

The Wastewater Infrastructure Department managed unit-price contracts for cleaning and TV inspection of existing sewer lines, various trenchless methods of repairs for identified major rehabilitation needs, manhole rehabilitation, and service lateral lining and excavated repair.



linear feet of sewer main were cleaned and inspected



linear feet of sewer main were repaired using trench-less lining methods



manholes were rehabilitated or replaced



sewer service laterals in the public right-of-way were rehabilitated or replaced

Private Side Lateral Program

The Private Side Lateral Program progressed this year in several locations that continue to have high levels of Inflow and Infiltration (I&I) despite rehabilitation of the ECUA sanitary sewer collection system within the right-of-way. Sewer basins with the most severe levels of I&I were identified as locations to start the program. A multi-departmental team was assembled to perform smoke testing, inspect sewer service laterals, review the results, and notify customers of any lateral deficiencies that need correction. Removing these sources of I&I, at approximately 30 locations, will have a major positive impact on the operation of the collection system during storms.

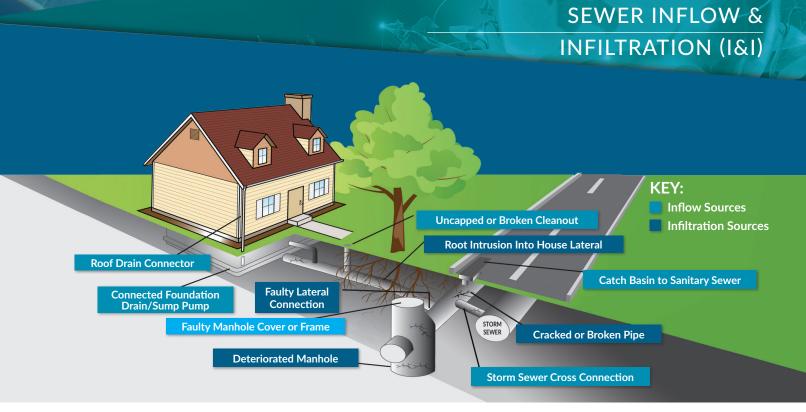
WASTEWATER INFRASTRUCTURE ADDITIONAL PROJECTS

Sanitary Sewer Collection System Master Plan

Sanitary Sewer Collection System Master Plan project began reviewing and prioritizing the 20-year capacity needs of the sewer collection system to include force mains, gravity mains, lift stations, and emergency storage provisions needed to adequately convey sewage to the ECUA's main wastewater treatment facilities. This master plan will be complete and become a useful tool for ECUA by mid-2021.

Pensacola Beach Wastewater Treatment Plant 18-inch Ductile Iron Pipe Restoration

In January 2020, ECUA staff performed an inspection of several segments of 18-inch diameter ductile iron pipe located on the south side of the Pensacola Beach Wastewater Treatment Plant. The pipe was determined to be severely corroded with a substantial amount of tuberculation (corrosion) on the internal walls of the pipe. This resulted in a significant decrease in the flow capacity of the pipe, making the eventual failure of this critical influent pipe to the Pensacola Beach treatment plant a concern. The pipe was repaired using trenchless methods versus typical excavation at a substantial cost savings. The ECUA Engineering department hired a contractor to utilize specialty cleaning and pipe descaling equipment to remove the tuberculation, successfully restoring the pipe to 95% of its original inside diameter. A cured-in-place liner is scheduled to be installed in 2021 to prevent tuberculation from forming in the future.





Why is it a problem?

ECUA has committed considerable resources to the elimination and reduction of sewer I&I through the last decade. This is an issue that affects, and is of great concern to wastewater utilities throughout North America. In 2012, ECUA embarked on a 16-year plan to address the situation. Protecting public health and the environment – and reducing wastewater treatment and transmission costs are direct benefits of a regional I&I control program.

WHAT IS I&I?

Excess water that flows into sewer pipes from stormwater and groundwater is called inflow and infiltration, or I&I. Stormwater rapidly flows into sewers (inflow) via roof drain downspouts, foundation drains, storm drain cross-connections, and through holes in manhole covers. Groundwater seeps into sewer pipes (infiltration) through holes, cracks, joint failures, and imperfect connections. Most I&I is caused by aging infrastructure that needs maintenance or replacement.

3 REASONS WHY I&I IS A PROBLEM -

Extra water in the sewer system is a problem because:

- 1 I&I flows can contribute to sewer system backups into local homes and spills into streets and waterways, negatively impacting public health and the environment.
- 1&I takes up capacity in the sewer pipes and ends up at the water reclamation facilities where it must be treated, increasing treatment costs.
- Over time, new and larger wastewater facilities are required to convey and treat larger volumes of flow caused by I&I, resulting in higher capital and operating expenditures.

INFORMATION TECHNOLOGY

IT Focus

The IT Department's focus for 2020 was the final phase of the IT Master Plan, created in 2015. This phase entails the implementation of the new Enterprise Resource Program (ERP), which will tie all of ECUA's business functions together. In the past year, our focus was on Asset Management and Work Order Modules that went live in January 2021, and the Human Resources Department that is scheduled to go live in July 2021. The Customer Service and Utility Billing phase started in August and is scheduled to be complete in January 2022. Countless hours went into these modules to configure and test the application, train staff, effect data conversions, and prepare ECUA for the new applications.

Another aspect of the final phase of the Master Plan is the refreshing of all the network hardware. We have deployed 10 Gigabit-capable network switches to five communication closets so far, increasing the network speed by a factor of 10 and helping separate the network and phone traffic so they don't interfere with each other.

Spreading the News

The IT Department received the 2020 Florida Local Government Information Systems Association (FLGISA) Technology Achievement Award for "Innovative Use of Technology to Serve the Public." This award recognizes the department's support in creating an information portal to assist our customers when calling ECUA for services. This portal visualizes the call center queue and shows when Customer Service Representatives are available to take a call. Additionally, the IT Department created multiple interactive maps on the ECUA website to assist customers in getting answers to questions that would have previously required a telephone call.



The IT Department was also recognized as the AT&T and Government Technology Magazine Special Districts Program award winner for Technology Innovation Operations. The Department's efforts in responding to the COVID-19 pandemic drew attention for the innovative use of an application portal and a download portal that facilitated our employees' remote work capabilities.

CyberSecurity

CyberSecurity remains a major focus. Ransomware attacks are one of the main concerns for IT departments around the world. Best Practice security methods include a strong back-up/restore process such as the 3-2-1 method where data lives in three physically separate places, on at least two different mediums (storage devices), and one offline backup. ECUA fully embraces this methodology, audited every quarter to ensure backups are functioning as designed, and that data are recoverable. An external Cyber Audit was performed earlier this year and the findings were minimal and easily implemented at the recommendation of the vendor. Another Cyber Audit will be conducted in 2021 and the IT Department is adding a Cyber Security position to better help manage the security at ECUA. Additional Firewalls were added to increase cyber security.

Covid-19 and Hurricane Sally

The IT Department managed to support remote working during the COVID-19 pandemic with a rapid response that included setting up employees' remote computers and telephones, building a portal where software and instructions could be downloaded, and an Application Portal where employees could get access to certain ECUA computer services and resources. A system that allows employees to take their desk phones home was also configured.

Hurricane Sally also proved to be challenging for the IT systems. Although the internal systems survived the storm, multiple providers' external communication lines were damaged, crippling telephone communications and some network connections. Network connections and telephone lines were repaired within a few days. This event gave the IT department the opportunity to examine areas of need and create better solutions to any shortfalls. Overall, 2020 was a busy year for the IT department. As ECUA is set up for the future, the reliance on technology will grow. Our focus will continue to be the streamlining of operations, making things go better, faster, and in a less costly way.

Infrastructure

We continue to upgrade and expand our IT Infrastructure, with an additional focus on resiliency after disasters. This has resulted in extra redundancy, expansion, and diversity in the data and storage systems, and in automation for patching and updating systems. The IT Department helped to set up a remote-control "Robot Sorting Machine" that was added to the Materials Recycling Facility (MRF).

Upgrades and expansions to the wireless infrastructure serving more ECUA locations increased the ability for handheld scanners during inventory and added connectivity for mobile users and vendors. Additionally, all the server infrastructure was upgraded with the latest versions of software and firmware to keep them up to date, and a solid-state technology was implemented for the Virtual Infrastructure. We added 10 Gig-capable ports to the core network infrastructure to support the new network switches that will be deployed in the coming months.

Geographic Information System (GIS)

In FY2020, a main accomplishment in GIS was the replacement of the antiquated Vantage Points mapping application with ECUAL (ECUA Asset Locator). This application is more user friendly, efficient to maintain, and provides a platform to integrate with other applications while allowing the retirement of older infrastructure no longer supported. This furthers IT's plan of upgrading the current infrastructure.

IT worked with Tyler Technologies to incorporate and validate ECUA assets into the Munis system. Munis work orders are tied to an asset and can now be tied to an

existing GIS location. Having ECUA's assets tied to Munis work orders and preventive maintenance, increases the company's ability to spatially view issues and hot spots, as well as run more in-depth reports and analyses.

IT also assisted Engineering and Regional Services in purchasing, configuring, and training numerous field technicians on new Trimble TDC150 GPS units. These units replaced old, out-of-warranty GPS units and provide functionality to update ECUA's GIS database directly from the field, thereby streamlining the data collection process. In addition, the units provide a means to convert

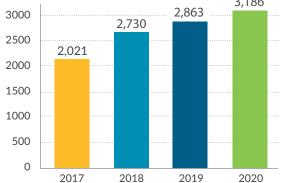
the current paper-based inspection method to a digital method. To date, 2,355 valves and 297 manholes have been collected, all while the technicians perform maintenance/inspections.

Taking advantage of the COVID-19 alternate work schedule, IT worked with Engineering Department staff to enter over 12,000 hard copy inspections into a database. This will serve as a master database for inspections as well as to provide reports for end users, and while linked to GIS, provide managers and employees the ability to spatially analyze field assets as required.

Staffing

From a staffing perspective, the help desk increased customer service by reducing the number of phone calls and surpassing by four percent the goal of ensuring that 90 percent of all support calls last less than five minutes. Our goal is to gather the pertinent information, enter a support ticket, and assign the ticket to the correct technician as quickly as possible. Staff completed 3,186 tickets and replaced 77 computers under the five-year life cycle replacement program, ensuring that all PCs in use are less than five years old. Starting with the next fiscal year, a six-year replacement cycle will be in place reflecting the PCs' better quality. At the turn of FY2020, the IT Department had three vacancies, expected to be filled in the early stages of FY2021. Many IT staff had training on various platforms and technologies, ensuring their skill sets stay current with the technologies being utilized or those planned for the near future.



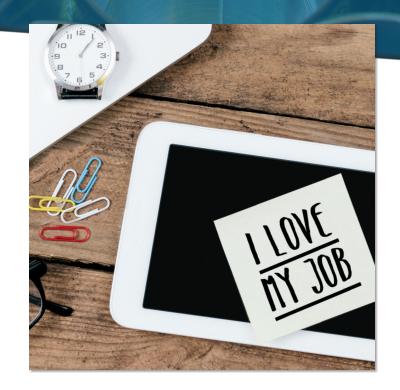


HUMAN RESOURCES

Trust and respect are the cornerstones upon which successful relationships are built, and once established, sincere engagement begins.

Research supports that happier employees are more productive and engaged employees. The focus and efforts of the human resources staff continue to be the successful management of our employees' needs so that the Authority can in turn meet and exceed the needs of our external customers.

In fiscal year 2020, human resources staff continued to foster and enhance employee engagement through sincere and timely interactions at every opportunity.



Connecting with Employees

Staff connected and engaged with employees during scheduled face-to-face events and virtual sessions, and through an abundance of electronic and written communication using the following channels:

- Ten Benefits Open Enrollment meetings
- Three Medicare and Social Security workshops
- Two Florida Retirement System webinars
- Health and wellness/lunch and learn workshops/ webinars
- Know Your Numbers wellness events at four ECUA locations
- Numerous individual employee career counseling sessions and team meetings
- An Employee Compensation and Benefit Statement provided at year-end to each employee
- Twelve monthly publications of the For Your Benefit newsletter distributed to each employee, plus one Special Edition for Retirees

Employee-related and Recruitment Metrics

The HR staff actively:

- Organized and coordinated Employee Length of Service Recognition, honoring 82 employees who reached their 5-year employment milestones
- Facilitated HR-on-the-Road (HROTR) to bring news, information, and event details to all departments
- Screened and processed 5,088 online job applications
- Conducted 407 in-person and remote interviews
- Proctored 37 written pre-tests for Wastewater Operator candidates
- Guided 26 new hire onboarding sessions and four quarterly orientation sessions to acclimate all new employees to ECUA
- Conducted 24 Job Application Training/Career Counseling sessions

HR recruited for 144 vacancies, which led to:

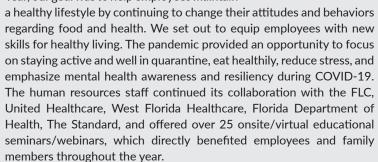


Health Coaching

Through our continued partnerships with Florida League of Cities (FLC) we provided 43 one-to-one health coaching sessions to employees and saw a 3.6 session participation rate above the incentive-level minimum of three sessions. Twenty-five percent of ECUA's Employee Assistance Program (EAP) referrals were made through health coaching. Most participants are making changes to their lifestyle habits, and 20% have maintained changes for a few months or more.

Lunch & Learn Seminars

The year kicked off with a "Health for Life" campaign that challenged employees to make at least ONE New Year's resolution for living a healthier life, and see it through to completion. As we headed into the New Year, our goal was to help employees maintain



Hometown Health Award

In August 2020, the Emerald Coast Utilities Authority was honored to be one of four recipients for the 2019 program year. This is the fifth consecutive program year that ECUA has achieved this award! Each year, ECUA's Human Resources Team works diligently to not only promote existing programs, but also on ways to elevate existing offerings on well-being.

The Florida Municipal Insurance Trust's annual Hometown Health Award recognizes health members who meet the nine best-practice standards for employee health promotion. Applications for this award are accepted once a year from eligible municipalities across the state that actively engage in the Hometown Health wellness program.

It is well known that employers play a vital role in creating a workplace that supports a healthy environment and a health-conscious culture. ECUA's collaborative efforts are a prime example of a workplace culture where employees feel they are actively supported, and have the resources necessary, to help them lead healthier lives!

The overall attendance at ECUA's annual KYN event in November 2019 totaled 243 participants.

The Health and Wellness Fair and Know Your Numbers (KYN) Event

ECUA's wellness program and initiatives foster healthier lifestyle changes among participants where the goal is not just to start, but also to strive for, a lifetime of balance. The program offers education, awareness, health screening, health coaching, flu/pneumonia shot clinics, wellness fairs, and many other interactive health-centered activities aimed at helping employees engage in a culture of wellness. We provided biometric screenings for 233 participants including 14 spouses, and 101 participants received flu and/or pneumonia shots.

Wellbeing Works Florida Award

ECUA participated in the State of Florida's first Tobacco Free Florida and Wellbeing Works Florida Program and was awarded third place in the Gold category. As one of eight Gold winners, ECUA is pleased to be recognized as an organization that is doing its part to ensure that the State of Florida will be among the top five states for well-being in 2030, according to the Florida Foundation and Florida Chamber of Commerce.



HUMAN RESOURCES

Through active participation in qualified wellness activities, ECUA reimbursed \$22,248.08 to 116 employees this year.

Healthy Choices Reimbursement Program

Employee participation increased with ECUA's Healthy Choices Reimbursement Program. Participants engaged in activities ranging from gym memberships, weight management programs, 5k/10k walk/run events, cross training, smoking cessation, dance instructions, and swim/golf lessons. Wellness Wins continued to be offered on-site, and FLC covered 33% of the cost for nine participating employees.

Chemical Reporting

The E-Plan system is the nation's largest database for chemical and hazardous material reporting, as regulated by the U.S. Environmental Protection Agency. Risk Management staff completed all requirements for the Tier II Chemical reporting, including disclosure of hazardous chemicals and fuel stored or located at ECUA facilities. In emergencies, accurate data in the E-Plan system can make the difference between life and death for First Responders and victims.

Commercial Driver's License (CDL) Internal Program

Risk Management staff maintained an in-house CDL training and testing program to comply with the updated Florida Department of Highway Safety and Motor Vehicles division's third-party tester requirements. Through an inter-local agreement with Escambia County, ECUA Risk Management staff certified in CDL testing used the County's approved CDL testing site to test and train 12 ECUA employees who successfully obtained their CDL.



HR Staff's Professional Development

The HR staff's professional certification and educational development continued with PHR, SPHR, SHRM-CP, and SHRM-SCP certified members:

- Six staff members maintained local and national SHRM chapter memberships
- Two staff members attended the HR Florida Conference in Orlando, Florida
- One HR staff member continued as the HR Florida State Council conference Team Ambassador
- One HR staff member serves on the Board for the Greater Pensacola SHRM association for HR Professionals as the Chairperson of the Inclusion and Diversity Committee

Varied Programs Meet Diverse Interests

ECUA's Tuition Reimbursement Program encourages employees to enhance their educational development. Eight employees pursued undergraduate/graduate degrees, and/ or professional certifications through the program this fiscal year, while 117 employees completed the Landrum Leadership Training for supervisors and managers. The Learning Center, ECUA's on-line learning module for professional development, continues to have an increase in class registrations.

Enrollment in the Learning Center's web-based courses.



Commercial Insurance

In FY2020, staff reviewed and maintained insurance policies for Property, Automobile Liability and Physical Damage, Workers' Compensation, Cyber Liability, Crime Coverage, Flood Insurance, Pollution Liability, and Road Restoration Bond.

Public Health and Safety

During FY2020, 74 of our employees were certified by the American Heart Association by successfully completing the cognitive and skills evaluations in accordance with the curriculum of the Heart-Saver First Aid, CPR, and AED program.

Staff also coordinated through the Florida Municipal Insurance Trust (FMIT) multiple 2-hour Defensive Driving classes offered to our employees. The course provided the knowledge and safe driving techniques that, when applied, can prevent collisions and traffic violations. A total of 65 employees from our Regional Services and the Central Water Reclamation Facility attended this valuable course.

LOSS RECOVERY

Risk Management staff pursued subrogation recovery for ECUA property losses caused by others. Through subrogation efforts, ECUA recovered \$488,963 to offset property damage losses caused by others.

Workplace Safety, Training and Security

Training provided to employees covered numerous safety and health subject areas such as Active Shooter, Hands-on Fire Extinguishers, Lockout/ Tag Out, and Ladder Safety, just to name a few. During FY2020, the Risk Management staff conducted 3,908 hours of safety and health training for our employees. We're pleased that formal professional development and continuing education classes resulted in 308 employees receiving certifications or certificates of completion:

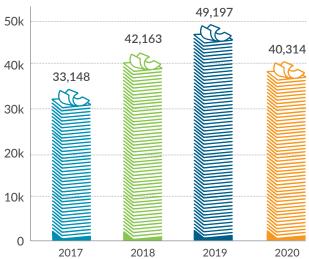
- 31 FRWA Chlorine Safety (6-hour)
- 15 FWPCOA Wastewater Collections Operator B (32-hour)
- 74 American Heart Association Heartsaver First Aid, CPR and AED (5-hour)
- 24 Autocar Truck ACX Xpeditor training for Fleet Mechanics (7.5-hour)
- 65 FMIT Defensive Driving (2-hour)
- 21 Intermediate Maintenance of Traffic (IMOT) refresher (8-hour)
- 22 Intermediate Maintenance of Traffic initial (16-hour)
- 37 Confined Space Entry for Entrant and Attendant OSHA 1910.146 (8-hour)
- 19 TREO Asbestos: Cement Piping Class II OSHA1926.1101 (8-hour)

Community Involvement

To promote the presence and awareness of ECUA as a premier employer throughout the local community, over the course of the fiscal year HR staff participated in the following external events:

- 19 PARTICIPANTS
 Blood drive with OneBlood
- JOB SEEKERS
 Gulf Power Job Fair
- JOB SEEKERS
 PSC 25th Multicultural Job Fair
- 825 STUDENTS
 Tate High School Career and
 College Day
- 256 JOB SEEKERS PSC Spring Job Fair
- JOB SEEKERS
 Interview Panel for Escambia County
 Human Relations Commission
- JOB SEEKERS
 HRFL Conference
- JOB SEEKERS
 CareerSource Escarosa
 Virtual Job Fair
- 78 JOB SEEKERS
 CareerSource Escarosa
 Re-Employment Escarosa Campaign
- "The Right Talent, Right Now" mock interviews for the Northwest Region Community Relations & Employment Services Agency for Persons with Disabilities
- Employee Relations Symposium at UWF
- GPSHRM's Spirit of Giving silent-auction benefiting the Favor House of Northwest Florida
- Santa Rosa County Virtual Job Fair

Recyclables Processed in Tons



Administration Division — ECUA MRF

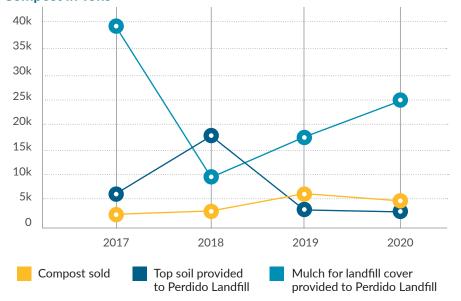
During FY 2020, the ECUA Materials Recycling Facility (MRF) processed recyclables from the ECUA, Escambia, Santa Rosa, and Okaloosa Counties as well as the Cities of Pensacola and Fort Walton Beach, FL. The MRF also processed recyclables from the Cities of Mobile, Andalusia, Atmore, Foley, and Fairhope and three private haulers providing service for two counties in Mississippi and multiple commercial locations in Florida and Alabama. The MRF processed a total of 40,314 tons of recyclables during FY 2020 compared to 49,197 tons of recyclables during FY 2019, a decrease of approximately 18%. The daily average of 154 tons processed per day during FY 2020 decreased from an average of 191 tons per day in FY 2019. The decrease in the amount of recyclables processed is due to fewer recyclables being delivered by Santa Rosa and Okaloosa counties during the fiscal year and the two week shut down in September following Hurricane Sally.

BCF SOLD 4,945 TONS OF COMPOST IN 2020

Bio-Solids Composting Facility

In its fifth year of operation, the ECUA Bio-solids Compost Facility (BCF) continued to expand and produce a high-quality compost product. The BCF accepted 26,114 tons of yard waste in 4,057 loads from ECUA and Escambia County collection vehicles. During FY 2020, the BCF sold 4,945 tons of compost and provided the Escambia County Perdido Landfill with 25,761 tons of mulch for landfill cover and 3,572 tons of topsoil for slope stabilization.

Compost in Tons



75% of our Sanitation Customers Recycled in 2020

Recycling Division

In FY 2020, 61,264 or 75% of ECUA Sanitation customers in Escambia County participated in the residential curbside recycling program. These customers produced 14,033 tons of recyclables that were processed at the ECUA MRF, which is an increase of 1,112 tons compared to FY 2019. The diversion of this amount of tonnage reduced ECUA's residential disposal cost by \$632,327 during FY 2020.

Staff is continuing efforts to educate ECUA customers on the proper use of the recycling container through multiple media outlets and public education outreach. Collection staff also identify recycling cans that contain contamination, and repeat offenders' recycling cans are removed for one year. We initiated the Recycle Star program in FY 2019 to recognize and reward customers who recycle properly.



Residential Division

In FY 2020, each of ECUA's 81,686 residential customers generated an average of 1.41 tons of waste. This resulted in the collection of 115,963 tons of residential solid waste during the fiscal year. The total number of Escambia County sanitation customers decreased by 741 during FY 2020. The total disposal cost for residential garbage increased due to the additional tonnage and totaled \$4,916,027 in FY 2020 (\$4,319,894 in FY 2019). Staff believes the reduction in the number of customers and the increase in tonnage collected are both due to the COVID-19 pandemic.

Yard and Bulk Waste - During FY 2020, ECUA crews collected 23,457 tons of yard waste and 8,049 tons of bulk waste.



Commercial Division

Roll-off services provided 1,994 service pulls and 446 container deliveries throughout the year. The total number of requests for roll-off service was 2,440, compared to 2,414 in FY2019.

Commercial dumpster operations resulted in the collection of 15,046 tons of garbage from locations on Pensacola Beach and the Mainland of Escambia County, which is a decrease of 524 tons when compared to FY2019. This decrease is due to less commercial activity on Pensacola Beach due to COVID-19 and Hurricane Sally. The Commercial Division added 51 new commercial customers in FY 2020, a significant decrease compared to the 121 new accounts added during FY 2019, due to the pandemic and Hurricane Sally.

Contact Center

With the outbreak of COVID-19, we established a 'homebound work force program' for employees to help prevent the spread of virus in the Customer Service Department. The ability to answer customers' calls from home limited the number of employees in the office, in adherence with recommended CDC social distancing guidelines. The homebound program proved to be a success and customers continued to receive friendly, quality service.

In the same vein, we established telephone and online procedures to accommodate customers whose business with ECUA would traditionally be handled in person at our Customer Service Center (CSC). Instead, documents and paperwork are processed prior to the customer picking up their copies and paying for service through our drive through service.

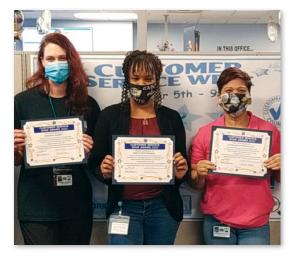
Customer Service re-established their onsite work force immediately after Hurricane Sally to assist those customers who were without water and/ or sewer services and to help with any questions regarding storm debris removal. Despite hurricane-related issues with the phone system, we continued to assist walk-in customers in the CSC and via social media.



Montel Griffin, Water Service Tech, received the award for the highest number of cut nonpays completed, allowing us to collect outstanding balances on over 2,000 delinquent accounts.

Incentive Program

This incentive program has been extremely beneficial to the Customer Service Department, promoting success in all areas. Employees are challenged to perform at higher levels without sacrificing professional, quality and friendly service. We are witnessing higher morale levels in our employees who display a true sense of ownership in their work performance. Seventy percent of the Customer Service Specialists received incentive pay over the last year reflecting their high performance levels.



National Customer Service Week

ECUA has celebrated National Customer Service Week for over two decades. Although our festivities had to be scaled back due to the COVID-19 pandemic, the Customer Service Department made a special effort to thank our internal customers by inviting other departments on campus to enjoy breakfast and lunch during the week of October 5th. Additionally, we participated in a two-part training class entitled 'Achieving Mindfulness at Work'. These classes focused on 1) The Case for Mindfulness and 2) Evaluating Your Mindfulness at work, which emphasized work performance and the individual aspects of physical and mental health.

The Top Performer Awards were presented to the Customer Service Specialists (CSS) who earned the Customer Service Incentive for each quarter of the 2020 fiscal year. To earn this incentive, the CSS must have a qualifying score for call quality, the required number of calls, customers processed, served, and accuracy in paperwork and adjustments. This year's top performers include DeAndra Brand, Essie Harrington, Brianna Rubert, Lenita Stephenson, and Cassandra Strickland. We salute these outstanding individuals and thank them, as well as all of our Customer Service employees who strive daily to provide exceptional service to all of ECUA's internal and external customers.

Customer Survey — Once again, we validated the outstanding service provided to our customers with an overall satisfaction score of 4.91 on the customer surveys completed – with 5 being the highest rating score available.

Support of Sanitation and Regional Services

Our Water Service technicians assisted the Sanitation and Regional Services Departments when we ceased cutting water services during the first three months of the COVID-19 pandemic. We were able to allow the technicians to assist both of these departments after Hurricane Sally hit the Gulf Coast area.

Mentoring/Cross Training Program

Our mentoring program continues in the Contact Center with experienced staff supporting newly-hired members on our team. This is an essential function of the continuing training process for customer service. We are currently developing a cross-training schedule for all areas of customer service. Every employee will at some point be rotated throughout all areas of Customer Service. This will create a pool of employees that will be prepared to assist in all facets of the Customer Service Department whenever the need arises.

Inter-Departmental Cooperation

Customer Service continues to assist with the process of notifying customers who have damaged sewer laterals of the need to repair the damaged sewer lateral or sewer line, to prevent inflow from entering our sewer system. When circumstances allow, our Water Service Techs assist Metering/Billing in documenting consumption levels on inactive accounts to ensure that these customers create active accounts with ECUA.

Holiday Cheer

Customer Service held a desk/cubicle decorating contest for the holidays. This promoted positive morale for our team and encouraged the understanding and importance of teamwork as well as contributing to team spirit.

Continuing Education/Training

Members of the Customer Service Department continue to attend HR training courses designed for continuing education and information on providing quality service to our customers. Supervisory and administrative staff received additional training in the new utility billing function and training with the Enterprise Resource Planning (ERP) software in 2020.

We have scheduled and taken several of the training courses offered by the NEOGOV website. Some of the training components include 20 Clever Ideas for Stopping Interruptions at the Office, 5 Traits of a Great Work Place, Ways to Reduce Stress at Work, Creating an Inclusive Work Environment, 9 Ways to Smarter Everyday, 6 Big Roles Every Great Leader Takes to the Office, and 5 Clear Signs It's Time for You to Fire a Toxic Employee.

2020 saw email inquiries continue to rise as walk-ins, fax inquiries, and delinquent notices continue to drop.

Customer Service Annual Totals	2018	2019	2020
Calls Answered	369,801	. 399,372	349,479
Mail Inquiries Completed	. 22,116	16,876	. 17,889
Email Inquiries Completed	. 30,029	35,139	. 61,216
Walk-in Customers Serviced	. 15,386	13,135	7,624
Work Orders Issued	. 30,713	32,119	. 26,431
Kubra Payments Processed	103,270	. 102,934	. 36,443
Water Service Cut/Non-pay Orders	. 23,774	21,156	. 14,081
Fax Inquiries Processed	. 5,257	2,580	1,455
Delinquent Notices Issued	198,563	. 190,747	174,303

COMMUNICATIONS AND GOVERNMENT AFFAIRS

The Communications and Government Affairs Division provides general administrative support to the Executive Director and the other ECUA staff with respect to internal and external communications, and coordination with various outside organizations. The ECUA maintained its community involvement throughout FY 2020 with numerous public appearances and presentations, as well as our regular coordination with other local and state agencies and organizations.



Giving Back to Nature

ECUA continued its membership on the board of BRACE (Be Ready Alliance Coordinating in Emergencies), and participation in the Pensacola and Perdido Bay Estuary Program. The Estuary Program focuses on the development and implementation of a comprehensive program for water quality management throughout the combined Pensacola Bay and Perdido Bay watersheds. We contributed in the planning and administrative support for the expansion of the existing reclaimed water system that provides irrigation water for the public right-of-way on Pensacola Beach.

A few years ago, ECUA constructed a new ground storage tank through funding from the Northwest Florida Water Management District. ECUA has confirmed approval of a grant for expansion of the existing reclaimed water distribution system through the Natural Resources Damage Assessment (NRDA) program, which is related to the 2010 Deepwater Horizon oil spill recovery efforts. This proposed expansion will allow ECUA to provide reclaimed water to a wider customer base for irrigation purposes on Santa Rosa Island, and will further the conservation of valuable drinking water and reduce the surface water discharge from the water reclamation facility.

Finally, we supported the ECUA Utility Operations group in coordinating the update of the forest property management plan for approximately 2,000 acres surrounding the ECUA's Central Water Reclamation Facility. The plan includes a focus on ecosystem management to support the development of a new ECUA wellfield while we tend to and harvest timber resources that existed at the time of ECUA's acquisition of the property.

FloridaWest Economic Development Alliance

We continued to see a steady increase in the number of development requests for properties within the County's wellhead protection areas this fiscal year. Our involvement entails detailed review and comments, focusing on the protection of our community's groundwater resources and ECUA's drinking water supply. For the sixth consecutive year, we served as representatives of ECUA on the board of the FloridaWest Economic Development Alliance, which is focused on advancing our region's economic health and vitality.

ECUA in the Media

Every year, we strive to maximize our investment in television and radio advertising by focusing on specific targeted areas of our business. This year's media outreach aimed to raise awareness and educate our



customers on several key issues: the damaging effects of Inflow & Infiltration on our wastewater infrastructure, the ongoing and critical need for utility system and capital improvements, the prevention/reduction of recycling contamination, and the deterrence of Fats, Oils, and Grease in our sanitary sewer collection system. During the 2020 fiscal year, staff provided over 50 interviews to radio, television and print media, and issued over 140 press releases.

Public Information Office (PIO) ECUA in Print, Online, and on the Road

Disseminating information to our customers in a timely and targeted manner is an ongoing effort and is the core of our mission. The PIO staff produces a variety of printed materials over the course of the fiscal year: a monthly newsletter that accompanies our customers' bills in Escambia County; a quarterly newsletter to our Santa Rosa residential sanitation customers: collateral materials such as refrigerator magnets and other giveaway items that promote awareness of our Recycling and FOG programs; and numerous informational flyers related to sanitation and recycling services, backflow prevention, and FOG. Working with advertising agencies, staff guides the creation of advertising for broadcast, print and online publications, website and social media applications, as well as the Authority's Annual Report and the Annual Water Quality Report. This essential document, also known as the Consumer Confidence Report, is published and posted to the ECUA website annually in May.

We redoubled our efforts to combat the contamination of recyclables with another billboard campaign, which our PIO staff again adapted for use on our new sanitation trucks. In the true spirit of recycling, this doubles the return on our creative investment and assures that our message is taken directly to the community we serve, at minimal cost.

This year, we updated our 'micro website' LivegreenECUA.com to reflect changes in our recycling program, composting and water conservation pages. Our social media presence continued to grow with our Facebook page, and has proven to be a beneficial means for promoting our programs and sharing about the events in which



ECUA participates. This proved to be an invaluable communication tool as we began to respond to the effects of COVID-19 on our operations in March and April 2020, and immediately before, during, and in the aftermath of Hurricane Sally. When our telephone service provider was down for a week, Facebook proved to be one of the only means of communication with the public, and our followers nearly doubled in the course of a few days.

We replaced our 6-year-old website with a refreshed and technologically upgraded site in April 2019 and continued to expand the features of this site through fiscal year 2020. The Map Gallery was expanded to include two new sections focusing on Capital Improvement Projects approved for FY2020 and FY2021 and current sewer expansion projects. Our Water Quality page now includes a section on a group of chemicals known as PFAS, a growing concern throughout North America, and ECUA's proactive measures to address this developing issue.



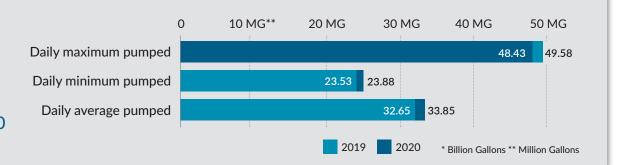
Public Outreach Programs

ECUA's important environmental programs have a pronounced impact on our community. While the reality of COVID-19 began to affect our daily lives halfway through our fiscal year, we made every effort to maintain our public outreach programs and sustain our communication efforts wherever possible. We shared our immediate program priorities through several means: our Newcomer's Welcome Kit, distributed to approximately 1,500 new home buyers, 35 Neighborhood Watch appearances, participation in 147 community and school events, and public speaking appearances at local, state, and national organizations.

This year, Public Information staff did not create a calendar due to the impacts of the pandemic, and the absence of venues for calendar distribution. However, we are looking forward to resuming the publication of this most popular and annually-anticipated public education tool with a 2022 edition. Intended for distribution to employees and customers, the calendar typically features beautiful local photography that highlights an ECUA program or service each month, as well as providing educational material in support of our Recycling and FOG programs.

WATER PRODUCTION

12.39 BG*
of water were
pumped and
treated in 2020



ENGINEERING ANALYSIS

■ Hagler Well Treatment Analysis

The Hagler Well was taken out of service several years ago to evaluate the effectiveness of different treatment methods for the removal of perfluoroalkyl and polyfluoroalkyl (PFAS) substances. In FY 2018, we performed tests on the water from this well to gauge the effectiveness of Granular Activated Charcoal (GAC) treatment for removal of these contaminants. Working with an engineering consultant in FY2020, staff

signed an agreement with a resin supplier to test several resins in order to determine their ability to remove PFAS. The resin test is ongoing and should be complete in FY2021. Once the pilot project is complete, we will evaluate the different treatment options and consider the cost to install, operate, and maintain treatment in order to return this well to service.

North Zone Master Plan

The water system master plan update for the north water zone was completed in 2019 and its report provides recommended improvements in order to meet future demands. During the Spring of 2020, due to high water demands, staff and our engineering consultant collected flow and pressure readings and found that the Beulah Area's diurnal curve (daily use pattern) was oddly different than the remainder of the system. Based on this, the consultant submitted a proposal to perform additional modeling to refine and revise recommendations made in the existing North Zone Master Plan Report.

■ Pensacola Beach Reclaimed System

A 2.5-million gallon tank, built as a reclaimed water storage facility, is currently serving as a potable water tank until the reclaimed water mains and Booster Pump Station are constructed. An agreement with FDEP will provide a \$4.68 million grant to fund the construction of these system components.

■ Risk and Resilience Assessment/Emergency Response Plan

The American Water Infrastructure Act (AWIA) of 2018 requires water utilities to certify the completion of two actions. One is that utilities complete or update their Risk and Resiliency Assessment by March 31, 2020. This was accomplished on March 25, 2020. The second requirement entails that utilities update their Emergency Response Plan to address concerns raised in their Risk and Resiliency Assessment. ECUA accomplished this requirement on September 22, 2020.

■ Water Storage Tank Inspections

A consultant performed annual inspections (OSHA and Safety work) of all tanks and a five-year comprehensive inspection of one tank. Staff has reviewed the recommended improvements and scheduled the work as appropriate. The consultant also performed a follow-up inspection to check on the current condition of the West Tank since the recommended tank work has not yet been funded.

■ Water Facility Optimization

ECUA entered in a Planning Assistance to States (PAS) costsharing agreement with the US Army Corp of Engineers (USCOE) for a consulting Engineer to review ECUA's water facilities and their scheduled use, in order to optimize their operation. Phase I was completed and staff is preparing plans to enact the recommendations. Staff is working with USCOE to obtain funding for Phase II.

Water Facility GACOptimization Study

Water Production (WP) Staff and an engineering consultant are exploring ways to optimize GAC treatment of the raw water at wells. Options being considered include lead-lag vs. parallel operation of the vessels, the removal of competing constituents, and other cost-saving possibilities. Staff met with the consultant to review their draft report while additional testing will be accomplished before completion of this study.

■ Water Facility Radionuclide Treatment Study

This study aims to identify the most efficient/cost effective treatment for removal of radionuclides, to allow ECUA to provide any required treatment as expeditiously as possible, should the need arise. A draft of the treatment report is under review by staff and the consultant.

West Well and Tank

A feasibility study was performed In 2017 to determine the best options for the construction of a ground storage tank, pump station, water treatment facility, and possible replacement well. Additional work is being performed to expand the study to include the possible drilling of a new well vs. upgrading the existing well.

■ Well Maintenance (WM)

This division provided accident-free preventive maintenance and repairs at well sites including: the continued upgrading of chlorine, fluoride and pH monitoring equipment, testing all generators to assure electrical power during emergencies, and the backwashing of GAC vessels.

WM staff assisted contractors with work at water production facilities such as with inspections of corrosion protection systems, GAC vessel rehabilitations and carbon change-outs, as well as making repairs to pump-off tanks, and draining facilities for required inspections. In collaboration with our Instrument/ Electrical Division, WM staff replaced the pump-off valves at the Spanish Trail and Muldoon Wells. Static and draw-down water level measurements were taken at each well for calculation of specific yield (performance test) as well as monthly electrical and vibration readings at well and booster pump facilities.

WATER PRODUCTION

DESIGN PHASE

■ Innerarity Booster Pump Station Rehabilitation

WP Staff is working with an engineering consultant to design improvements to the Innerarity Booster Pump Station that would enhance water pressure to Innerarity Point and Innerarity Island.

Central Well Field

There are two production wells at this site. WP staff prepared a conceptual plan for completing the installation of a water treatment facility at one of the two installed wells along with a transmission main from that well site to US 29. We have received a proposal to prepare plans and specifications for constructing the water treatment facility and transmission main for one of the existing wells. Staff is waiting on funding to bring the engineering proposal to the Board for approval of construction.

■ Lime Room Rehab 2021

Staff is continuing to prioritize and perform work to rehab lime rooms at Water Treatment Facilities, and prepared the 2021 list of wells whose lime rooms are in need of rehabilitation.

■ Nine Mile Road Booster Pump Replacement

The pump at the Nine Mile Road Booster Pump Station needs to be replaced. An engineering consultant has utilized ECUA's water distribution model to identify pumps that meet the pump design conditions most effectively and has provided staff with several quotes for recommended pumps. This work is needed to provide better flow and pressure in the Beulah area, north of Nine Mile Rd.

CONSTRUCTION PHASE

■ Airport North Well Rehabilitation

The Airport North Well's shaft failed, rendering the well inoperable. ECUA's Annual Well Maintenance Contractor pulled the pump assembly and replaced the failed shaft section.

■ Ellyson Well GAC System

Design of GAC treatment for removal of low levels of PFAS from this well was completed, and site construction is ongoing. Four GAC Vessels were delivered to the site in January 2021.

■ Mobile Highway Booster Pump

Plans and specifications have been prepared and bids received for the installation of a booster pump along Mobile Highway, which will allow filling of the Mobile Highway Pump Station tank without creating low-pressure issues for customers in the area.

Muldoon and Avondale Wells' GAC Vessels

Design of GAC treatment for removal of low levels of PFAS from each of these wells was completed. A construction contract was awarded and construction is ongoing. Six GAC vessels have been delivered to the sites and placed on their foundations. Piping for the vessels is currently under design.

■ Olive & Villa Wells' Rehabilitation

Staff observed that the Olive and Villa Wells' specific capacity (performance) was dropping significantly and had ECUA's Annual Well Maintenance Contractor rehabilitate the wells by cleaning the wells' casings and screens.

Perdido Key Tank Discharge Booster Pump

Plans and specifications to install a booster pump on the Perdido Key Tank discharge line are complete and bids have been received. This booster pump will allow better utilization of the tank without the need to lower system pressure. An award of bid has been approved, and construction will commence once contracts are signed and approved.

CONSTRUCTION PHASE

Tank Maintenance 2020

The recommended improvements from last year's inspections, including total coating replacement on East Tank, have been included into project specifications and the work bid out. This work is scheduled to commence in early January 2021.

Lime Room Refurbishment

Ellyson, Plant 6, Humphreys, Royce Wells

Rehabilitation of the lime rooms in the water treatment facility at each of these well sites is under way.

McAllister Well Rehabilitation

This well's motor failed and was rebuilt by ECUA's annual motor maintenance contractor. The rebuilt motor has been installed at the well and the well has been placed back into service.

■ West Pensacola Well Elevation Project (FEMA)

This well was flooded in 2014. Mitigation measures, such as adjusting the height of electrical equipment, are being performed through a cost-sharing agreement with FEMA. Bids were received, contracts issued and construction is ongoing.



CONSTRUCTION COMPLETE

Blue Angel Pressure Sustaining Zone Valve

This project involved the installation of a pressure sustaining valve on the 24-inch water main along Blue Angel Pkwy. to allow continuously-controlled supply from the North Zone to the South Zone, as needed. Construction of this project was completed and the pressure sustaining valve is in service.

OLF 4A Well

Lime Room Rehabilitation

Rehabilitation of the lime room in the water treatment facility at this site was completed.

SCADA Operations

SCADA (Supervisory Control & Data Acquisition) continued efforts to streamline and improve documentation concerning unplanned and scheduled water outages, the issuance of boil water notices, the use of best management practices in the field, and sanitary sewer overflows. SCADA staff coordinated with the Instrumentation/Electrical Division to complete several lift station and water well upgrades. Working with the Well Maintenance division, SCADA continued utilizing a water well-specific capacity (performance) reporting process, which enables personnel to identify and prioritize water well maintenance and repairs.

Finally, our server software was upgraded and SCADA coordinated with IT to increase virtualized server resource allocation, upgraded SQL software and re-indexed the databases.

The SCADA Operations Center handled 35,851 incoming and outgoing phone calls AND

.... issued 11,991 work orders

··· issued 109 precautionary boil water notices

called in 978 utility location requests to Sunshine 811

issued 64 best management practices

issued 61 sanitary sewer overflow reports to the Florida Department of Environmental Protection and the Florida Department of Health

Water Operations Division

Licensed Water Operators took 384 FDEP potable water compliance samples and visited/serviced well and pumping station sites 22,810 times. Water Operators completed Continuing Education Unit (CEU) regulatory academic requirements by attending regional training sessions sponsored by Florida Section of American Water Works Association (FSAWWA), Florida Rural Water Association (FRWA), and Florida Water and Pollution Control Operators Association (FWPCOA), as required to maintain licensure.

The update to ECUA's Lead and Copper sampling plan was completed in preparation for the sampling in FY 2020. Monthly Operating Reports (MORs) to FDOH and FDEP were submitted. The Division coordinated with ECUA's Water Quality Lab for FDEP and Northwest Florida Water Management District (NWFWMD) required sampling and testing, and submitted operational data to NWFWMD, in accordance with regulatory requirements.

15.972 GAL.

of orthophosphate for corrosion control (lead and copper) were used

(602-150 lb. chlorine cylinders) of chlorine gas for disinfection were used

90.298 LBS.

3,682,100 LBS.

of bagged, hydrated lime for pH adjustment were used

313,460 LBS.

of hydrofluorosilicic acid (Fluoride) for dental health were used



Regulatory Activities

Staff received a Revised Water Use Permit modification in FY 2020, which contained minor revisions to the permit modification received in 2018. We submitted data to the NWFWMD as required by ECUA's Water Use Permit. Test results and data were provided to the FDEP in accordance with prescribed rules and permits, and coordinated with FDEP and FDOH to collect and test water samples from several ECUA wells for PFAS. We reviewed plans and Wellhead Impact Reports to ensure Wellhead Protection Area (WHPA) compliance for the Escambia County Development Review Committee.

Cross Connection Control (CCC)

In 2020, CCC sent 9,841 notifications to commercial and residential customers to test, install or repair Backflow Prevention Assemblies (BPAs). Of these, 841 were follow-up letters for dedicated irrigation service connections, 19 were related to dedicated fire service connections, 1,040 were for follow-up letters and 2,473 were for five-year recertification letters related to auxiliary water supplies (private wells). We tested 399 BPAs at ECUA facilities and 51 hydrant meter BPAs, leading to the repair of 69 units.

Staff processed 8,226 test reports into an upgraded database, verified the initial compliance of 91 certification forms and verified the compliance of 483 five-year recertification forms related to private residential auxiliary water supply (private wells), and submitted the fourth required annual report of backflow data to the FDEP. The division conducted 671 surveys of existing commercial developments and reviews of 226 new commercial developments to ensure the correct type of BPAs are being properly installed, if required, and collaborated with local Fire Departments, the City of Pensacola, and Escambia County Building Inspections Departments to ensure that all commercial accounts had installed and tested their BPAs prior to receiving a Certificate of Occupancy.

Additionally, CCC collaborated with the Finance, Customer Service, and Regional Services Departments to log 71 meters with transient backflow readings and resolve exposed issues, address consumption and billing issues discovered during CCC surveys on three accounts, and held two Backflow Prevention classes for the progression of Service Techs. CCC also collaborated with the IT Department to streamline the process of receiving quarterly auxiliary water supply (private well) customer data from the NWFWMD. Staff collaborated with a software vendor and IT to transition the CCC database software to one more compatible with the new enterprise software.

Lift Stations (LS) Division

The division completed a total of 2,536 work orders related to preventive maintenance, capital improvement projects and standard repairs this fiscal year. The progression program for our LS employees continues to pay dividends as all four of our new LS Trainee employees earned a Class C Wastewater Collection Certification this year.

Hurricane Sally made landfall on September 16, 2020. Power outages in our service area left 340 lift stations without power. Crews were able to minimize sanitary sewer overflows (SSOs) by strategically utilizing by-pass pumps, generators, tankers, and vacuum trucks. Working around the clock and coordinating efforts with Gulf Power, all lift stations were back in service within six days of the hurricane.

The prevention of SSOs, costly major mechanical problems and clogged force mains continue to be a priority, along with the regular use of two vacuum trucks to remove fats, oils, grease and rags from all of our lift stations. The vacuum trucks also assisted various divisions and contractors with multiple small and large shutdowns, which were instrumental in preventing possible SSOs.

Our LS crews operated and maintained 377 lift stations and worked with ECUA Engineering and multiple contractors to: replace Patton Our LS crews operated and maintained 377 lift stations in FY 2020.

Drive LS and remove the old station; upgrade the Northeast Plant LS; and add six new lift stations to the system. In addition, in-house crews re-piped several of our older, existing stations due to agerelated pipe deterioration.

Tablets were issued to each crew/truck this year, which has greatly enhanced communication and productivity. Crews can now access the Infor system to obtain and input real-time information while in the field and access ECUA's GIS system to accurately locate underground utilities.

Odor Control Division

Odor Control's two-man crew completed 713 preventive maintenance and emergency work orders, and dealt with numerous customer odor complaints. Additionally, the crew serviced and maintained 42 odor control media scrubbers and blowers at all lift stations and our three water reclamation facilities: serviced and replaced the media and cleaned the scrubbers at ECUA's three Regional Pump Stations twice this year to keep all odor complaints to a minimum; serviced and replaced the media on all of the Calgon vents on the CWRF transmission main; and collected monthly hydrogen sulfide (H2S) readings.

Generators Division

Our Generator crew completed 709 preventive maintenance and emergency work orders. These included: the servicing and maintenance of 43 portable and 62 permanent generator units in the ECUA system; the installation of an automatic transfer switch (ATS) for a portable unit at one lift station site; the load testing and verification of ATSs as part of a monthly testing program; and the management of fuel tank inspections and tank compliance with the Florida Department of Environmental Protection (FDEP).

Additionally, the staff and crews continued with a generator fuel testing system that entails polishing and cleaning of the fuel to prevent algae and condensation from building up in the fuel tanks due to long-term storage. The clean fuel has reduced the amount of clogging on injectors and increased the life span of the fuel filters on the equipment. Crews also cleaned and painted five fuel tanks located at various water wells and lift stations throughout our system.

Plant Maintenance

The division coordinates all preventive mechanical maintenance at ECUA's three water reclamation facilities, three regional pump stations, the Materials Recycling Facility, and the Composting Facility. The Plant Maintenance division completed over 2,681 work orders in FY 2020, while also providing support and direction to contractors working on capital improvement projects for ECUA.

MAINTENANCE & CONSTRUCTION

Information Systems/ Warehouse Division

A total of 2,907 parts were received and 2,263 parts were issued through the Infor EAM (Enterprise Asset Management) system at the CWRF warehouse, a decrease from FY 2019 of 40% and 49.6%, respectively. Infor EAM's database continues to expand with 1,016 new part records created, for a total of 13,158 part records, and 635 new asset records created, for a total of 5,249 asset records.

The division processed 998 purchase requisitions through the Infor EAM. Consumable hardware and fittings are now vendor-stocked on site. This contributed to a continued reduction from FY 2019 in non-work order related credit card purchases and a savings in non-productive labor hours.

The annual CWRF warehouse inventory and audit were completed with zero discrepancies. All spare mechanical parts for the Materials Recycling Facility (MRF) were returned to the MRF personnel and removed from CWRF warehouse.

Government Street, Moreno Street and Pipeline Road Regional Pump Stations (RPS)

Plant Maintenance oversaw the removal, rebuilding and installation of two pumps from Moreno Street RPS and one from the Government Street RPS. Plant Maintenance coordinated the removal, testing, and repairs of the three pressure relief valves located at the Regional Pump Stations

Plant Maintenance installed an automatic sluice gate valve at Moreno Street RPS, allowing control of flow diversion to the Government Street RPS. I/E staff installed the power and controls' wiring for a new actuator on the station inlet sluice gate. This allows automatic operability for stopping and starting flows to the pump station based on operational conditions.

At Pipeline Road, Plant Maintenance and I/E staff installed six new valve actuators on the tanks' inlet, outlet, and drain valves. This improves the reliability of the valves' operations and facilitates the flow diversion process when needed. I/E staff also installed electrical power and controls for two actuators for the newly-installed 24-inch valves, allowing pumps 1 & 2 to be isolated from pumps 3 & 4 for maintenance purposes.

Instrument/Electrical (I/E Division)

The division completed 3,150 work orders related to preventive maintenance, capital improvement and standard repairs this fiscal year. We provided training to I/E personnel on Rockwell's RSLOGIX Studio 5000 PLC software, basic instrumentation, SCADA radio configuration, and Arc Flash Safety/Lock-out/Tag-out training to the entire Maintenance & Construction Department. At the Pensacola Beach Water Reclamation Facility (WRF), crews oversaw and assisted with the Plant 2 lift station upgrade and the installation of the holding tank automated flow diversion valve. At Plant 1, I/E crews installed three VFD control panels for the plant blowers.

Crews oversaw and assisted with the programmable logic controller (PLC) and controls upgrade on the two Aqua Diamond filters at the Bayou Marcus WRF. This replaced obsolete components and improved the reliability and repair of the filter controls. At the MRF, crews installed a power panel and wiring for the new Robotic Sorter and added a backup Hypervisor server for the main Human Machine Interface (HMI).

I/E crews commissioned six new lift stations and added surge protection equipment on old/obsolete equipment at an additional 14 lift station sites.

CWRF and Composting Facility

Plant Maintenance installed the new Kaeser 100HP air compressor, which provides air pressure to the bearings of the paddle dryers and all ancillary equipment. I/E staff installed the associated electrical power. This compressor has enough capacity to be used in an emergency to provide air to run the pneumatic operations of the entire Bio-Solids building. Our staff completed the rebuild of paddle Dryer #1 vessel and paddle surfaces, along with the installation of the new 200HP Paddle Dryer reduction gear unit. The existing gear unit was overhauled and placed in stock as a spare.

Plant Maintenance performed an overhaul of the Composting Facility's Morbark 1300 grinder's hydraulic system and boom pedestal ring gear assemblies. I/E staff replaced the damaged power distribution box for the tub grinder, allowing it to be re-positioned for more efficient operation. In addition, I/E installed an air conditioning unit on the tub grinder's electrical controls panel, greatly reducing heat-related failures.

Central Water Reclamation Facility (CWRF) Pollutant Removal

PARAMETER/CALCULATION	EFFICIENCY	LBS. REMOVED	ANNUAL AVERAGE	DEP PERMIT LIMIT
Carbonaceous Biochemical Oxygen Demand (CBOD)	99.4%	10,616,576	1.57 mg/L	5.0 mg/L
Total Suspended Solids (TSS)	99.8%	17,184,895	0.6 mg/L	5.0 mg/L
Total Nitrogen (TN)	98.8%	1,833,671	0.7 mg/L	3.0 mg/L
Total Phosphorus (TP)	98.7%	288,984	0.09 mg/L	0.4 mg/L

The CWRF had a total flow of 4.943 BG in FY 2020 and earned a Silver award from the National Association of Clean Water Agencies (NACWA) for the 2019 calendar year, maintaining compliance with all but one of its 5,285 compliance metrics. This marks the fifth year for receiving an award out of the plant's eight eligible years.

Sampling and data analysis are of utmost importance in maintaining compliance with all rules and regulations from the FDEP and the EPA at the CWRF. In FY 2020, CWRF Operations staff pulled more than 4,500 samples and performed data analysis on more than 10,500 sample results required for process control and submitting reports to regulatory bodies.

The Water Reclamation Department employs 47 licensed operators, 18 of which have the highest license issued by the State of Florida, to oversee operations at three locations, 24 hours per day, 7 days per week. Four Water Reclamation operators advanced to the next level of FDEP-issued Operator's licenses after passing required coursework, on-the-job training, and a rigorous exam.



In fiscal year 2020, the facility processed approximately 238 million gallons of sludge from our three facilities, using it to create approximately 10.26 million dry pounds of biosolids for beneficial reuse as fertilizer and compost.

Biosolids Produced	. Totals in Wet Lbs.
Dried Biosolids for Fertilizer	52,708,258 lbs.
Class B Biosolids for Farm Land Application	5,887,440 lbs.
Class B Biosolids Provided to Compost	13,494,604 lbs.

Septage Receiving		Totals
Septage Loads		5,386
Septage Volume	14,126,0)75 gallons
Septage Revenue		51,161,843

Biosolids Handling

The ECUA Biosolids Facility located at the CWRF processes sludge from all three of our water reclamation facilities. CWRF biosolids drivers hauled 451,705 wet pounds in 4,462,500 gallons from the Pensacola Beach WRF, and 3,418,721 wet pounds in 10,136,000 gallons from the Bayou Marcus WRF. Operations staff in biosolids handling also collected and analyzed more than 19,500 samples for permit compliance and operational purposes, meeting all 714 of its compliance metrics.

WATER RECLAMATION



3.964 BG* of reclaimed water from the CWRF were reused

Guit Power	1.805 BG
On-Site Reuse	0.305 BG
International Paper	1.854 BG



1.988 BG* of reclaimed water from the Bayou Marcus WRF were reused

Northern Wetlands.... 1.383 BG
Southern Wetlands.... 0.605 BG



45.584 MG** of reclaimed water from the Pensacola Beach WRF were reused

*Billion Gallons **Million Gallons

Pensacola Beach Water Reclamation Facility (PBWRF)

PARAMETER/CALCULATION	EFFICIENCY	LBS. REMOVED	ANNUAL AVERAGE	DEP PERMIT LIMIT
Carbonaceous Biochemical Oxygen Demand (CBOD)	98.92%	377,479	1.48 mg/L	5.0 mg/L
Total Suspended Solids (TSS)	99.30%	241,185	0.62 mg/L	5.0 mg/L
Total Nitrogen (TN)	94.80%	82,209	1.62 mg/L	3.0 mg/L
Total Phosphorus (TP)	97.38%	10,826	0.11 mg/L	1.0 mg/L

The PBWRF had a total flow of 334.006 MG in FY 2020 and earned a Gold award through NACWA for calendar year 2019, maintaining compliance with all 4,165 compliance points.

COVID-19 and Hurricane Sally were major obstacles to operating the PBWRF this year. As beaches and short-term rentals were closed shortly after the annual Spring Break period for the pandemic, flows from the facility were cut by more than 50% in very short order. Staff was required to make significant operational changes to the facility to ensure compliance with all operating permit parameters through the months of March and April. In September, Hurricane Sally flows brought the plant's daily flows to more than double. After the storm, the facility was immediately restarted and did not violate its operating permit.

Bayou Marcus Water Reclamation Facility (BMWRF)

PARAMETER/CALCULATION	EFFICIENCY	LBS. REMOVED	ANNUAL AVERAGE	DEP PERMIT LIMIT
Carbonaceous Biochemical Oxygen Demand (CBOD)	99.77%	3,243,074	1.5 mg/L	5.0 mg/L
Total Suspended Solids (TSS)	99.83%	3,924,065	1.3 mg/L	5.0 mg/L
Total Nitrogen (TN)	98.88%	755,985	1.7 mg/L	3.0 mg/L
Total Phosphorus (TP)	98.74%	94,981	0.24 mg/L	1.0 mg/L
Ammonia (NH3)	99.96%	508,955	0.04 mg/L	1.6 mg/L

The BMWRF had a total flow of 1.988 BG in FY 2020 and earned a Gold award from NACWA for the 2019 calendar year, maintaining compliance with all 3,570 compliance metrics. As a community partner, the BMWRF also treated more than 9.7 million gallons of leachate from Escambia County's Perdido Landfill.

Hurricane Sally posed significant challenges to all of ECUA, including the BMWRF. During the event, the plant received 23.97 inches of rainfall and processed a record flow of 17.762 million gallons, with no permit excursions, more than three times its average daily flow!



The laboratory collected and analyzed more than 9,300 wastewater samples in 2020.

Water Quality Laboratory

The Water Quality Laboratory division is comprised of 10 Laboratory Analysts who facilitate the collection and analysis of samples in support of the Water Production, Wastewater Infrastructure, Regional Services, and Customer Service Departments. This year, the laboratory collected and analyzed more than 9,300 wastewater samples, more than 3,300 samples for the potable water system, and successfully resolved more than 120 customer service concerns through a combination of inhome visits and phone consultations. In addition, they coordinated the collection and analysis of samples for Primary and Secondary Drinking Water Standards, the Lead and Copper Rule Program, EPA's required Stage 2 of the DBPR (Disinfection Byproduct Rule), Volatile Organic Contaminants, Sanitary Sewer Spills, PFAS, Boil Water Notices, Best Management Practices, and Water Main Clearances.

The laboratory also successfully completed a biannual Florida Department of Health Audit and six proficiency testing evaluations, which examine overall laboratory operations as well as comparative sample analyses, in order to maintain National Environmental Laboratory Accreditation Program (NELAP) and Department of Health certifications.

Industrial Pretreatment Program (IPP)

The ECUA IPP is a regulatory oversight division as required by the FDEP and the EPA, in support of the National Pretreatment Program. In 2020, we continued to work with local industries by maintaining active industrial discharge permits and monitoring wastewater discharges through sampling efforts and analytical report reviews. Part of that includes the implementation of the Industrial Surcharge program to ensure that industrial dischargers who contribute higher levels of common pollutants are independently charged for their contribution(s), ensuring all other domestic users are not unfairly charged for the increased cost of wastewater treatment.

Other oversight accomplishments included the inspection of all 10 of the Significant Industrial Users (SIUs) of the sewer system and the implementation of the Mercury Minimization Plan as required by the EPA and FDEP for dental facilities. To date, the ECUA IPP has received 54 federally mandated One-Time Compliance Reports from dental facilities and has identified 16 facilities that are exempt from current regulations.

During the 2020 fiscal year, the ECUA IPP collected 729 wastewater samples from local industry, providing the basis to recover over \$1.7 million dollars in treatment cost for more than 175 million gallons of industrial wastewater discharged to the Central Water Reclamation Facility (CWRF) and over \$216,000 dollars in treatment cost for more than 13 million gallons of industrial wastewater discharged to the Bayou Marcus Water Reclamation Facility.

Regional Services East, West and South

The Regional Services (RS) Department consists of three regions (East, West, and South), which are collectively responsible for maintenance of the entire water distribution system, wastewater collection system, and wastewater force main system, along with all of the appurtenances that belong to these systems. The three regions are supported by the wastewater maintenance division, valve maintenance division, fire hydrant maintenance division, and pavement repair/debris removal division. Approximately 142,000 work orders were completed throughout the entire department during Fiscal Year 2020, averaging nearly 12,000 work orders per month. When fully staffed, the RS department employs 113 employees, which equates to over 100 work orders completed per employee on a monthly basis.

There are over 120,000 water meters in the ECUA water distribution system, and over 75,000 of the 142,000 completed work orders were related to maintenance or

Regional Services received nearly 28,500 utility locate requests, of which 10,500 required marking in anticipation of future construction proximal to ECUA's infrastructure.

service of water meters. All three regions continued the effort to repair or replace components of water meters with automatic meter reading (AMR) technology. A transition to AMR meters began more than ten years ago and the demands to repair or replace components, predominantly the register or the communication mechanism, have increased dramatically as the end of the warranty period on these devices approaches.

Regional Services Work Included: New Water Services 1500+ Installed **New Sewer** 1300+ Services Installed **Water Mains** 287 Repaired **Sewer Mains** Repaired **Water Services** 3500 Repaired **Sewer Services** Repaired 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500

Fire Hydrant Division (FH)

ECUA's water distribution system contains more than 7,500 fire hydrants that require maintenance and testing. In FY 2020, the division repaired 265 hydrants, performed preventive maintenance on 3,468 hydrants and tested them to evaluate flow performance, installed 1 new hydrant, replaced 24 outdated two-port hydrants with newer threeport hydrants, and performed 42 flow tests. The flush crew is a part of this division and performs a vital role in the maintenance of water quality in the distribution system. Over the year, the division flushed over 250 dead-end water mains, and performed more than 300 flushes in response to concerns about discolored water. The division completed four unidirectional flushing operations; a method used to achieve a more aggressive flush through increased water velocity in the pipe. The crew also installed five new automatic flushing devices on hydrants or other flush points, which are designed to automatically perform scheduled flushes with the use of a timer. This helps maintain water quality with only minimal maintenance by employees and reduces the demands on employee time and equipment. The group now maintains 269 automatic flush devices. The hydrant crew also performed 19 valve insertions, which is a method used



In 2020, the division performed more than 1900 flushes throughout the system as part of regular routine maintenance,

to install a valve without having to shut down the water or sewer main, thereby limiting disruptions to customers' service and promoting efficient use of employee time.

Staff completed 1,539 work orders to perform preventive maintenance on ARVs, as well as the abandonment of 44 ARVs to eliminate the threat of sewer overflows at these locations.

Valve Maintenance Division (VM)

The Valve Maintenance (VM) division maintains approximately 400 air release valves (ARVs) and nearly 22,000 valves in the water distribution system. Depending on the valve's condition, all the ARVs in the system were inspected and maintained every 30, 60, 90, 120 or 180 days, including 69 ARVs on the critical CWRF central transmission main (CTM). These valves were inspected and maintained at least on a quarterly basis. The VM division researched and purchased six state-of-the-art ARVs that are equipped with separate grease collection chambers designed to reduce the stringent preventive maintenance (PM) schedule currently required on the CTM ARVs. If they are successful, the 63 remaining ARVs on the CTM will be replaced with these new ARVs in FY 2021.

VM and the Fire Hydrant Division staff located and exercised more than 4,600 water valves throughout the year. The division repaired 36 broken water valves, and replaced or brought 545 valve boxes up to grade for enhanced accessibility. Overall, VM staff provided frequent support to the three regions and various other departments and divisions of ECUA including Engineering, Lift Stations, Plant Maintenance, as well as ECUA contractors by operating and maintaining valves critical to maintenance or capital improvement projects.

REGIONAL SERVICES

Fats. Oils and Grease Division

The Fats, Oils, and Grease (FOG) Division manages a program to enforce compliance with ECUA's FOG disposal requirements. The program involves inspection of 1,005 food service establishments (FSEs) to reduce the discharge of FOG into the collection system. The FOG division performed more than 1,728 total inspections of FSEs and also continued to manage discharge permit applications from FSEs in accordance with Chapter 6 of the ECUA Code.

An additional collection site was added for the Residential Cooking Oil Disposal Program, bringing the total number of sites to 14. These dropoff locations provide customers with an appropriate means of disposal for used cooking oil. More than 17,400 gallons of used cooking oil were collected at these sites over the year. The FOG division also worked directly with citizens to promote the reduction of FOG discharges by residential customers. Four apartment complexes and one mobile home park were targeted with public awareness campaigns reaching an estimated 1,000 residents.

Cooking Grease Collected in Gallons



Wastewater Maintenance Division (WM)

The Wastewater Maintenance Division coordinated with the Wastewater Infrastructure Division to reduce the number of sanitary sewer overflows (SSOs) that occur. Using four vacuum trucks, WM cleaned more than 1,043,000 feet of pipe this year in the gravity sewer collection system, and removed grease and other obstructions to restore proper function of the system. Wastewater Maintenance also used closed-circuit television (CCTV) to inspect nearly 253,000 feet of sewer pipe. These inspections yielded valuable information and identified 79 substantial pipe deficiencies that are now repaired. WM purchased a new portable CCTV system housed on a custom-built all-terrain vehicle to allow inspection of sewer mains otherwise inaccessible with a camera van.

The division responded to 1,078 calls from customers to investigate problems in the collection system, and completed nearly 400 work orders issued by other divisions and departments. Working with contractors, WM addressed root intrusion issues within areas of the collection system that are difficult to access, and implemented a biological treatment process to relieve extreme grease build up in areas of the collection system that are in close proximity to commercial food establishments. The division also performed smoke and dye tests of sewer mains in ten areas where severe Inflow and Infiltration (I&I) were noted in order to identify the deficiencies, have them repaired, and eliminate those sources of I&I.

CAPITAL IMPROVEMENTS

- Mackey Key Sewer Rehabilitation Regional Services staff completed the design and managed construction of the sewer force main upgrade in the Mackey Key subdivision in the East Region. Approximately 2,500 linear feet of force main were replaced at a total project cost of \$235,000.
- Easement Access And Maintenance Heavy vegetation and root intrusion are one of the leading causes of water main and sewer main fractures. Through the use of our annual clearing contract, we cleared approximately 4,500 linear feet of heavily wooded utility easements throughout the service area.
- Godwin Emergency Storage The final design for an emergency storage facility at the Godwin Lane Regional Services complex was completed in September 2020. Construction is scheduled to begin in FY 2021 for a total project cost of \$650,000.
- Valve Location and Maintenance A large scale water valve replacement project to restore functionality to these critical water system components is 50% through the design phase. Construction is scheduled to begin in FY 2021 for a total project cost of \$350,000.

CAPITAL IMPROVEMENTS

- Air Release Valve Replacement Through the use of the Annual Services Contract for Utility Construction, RS organized the effort to shut down multiple lift stations during the pre-dawn low flow period to permanently remove seven dilapidated air release valves from a major force main on Nine Mile Road, eliminating potential sources for sewer overflows. Two additional large scale efforts to abandon the remaining high-risk air release valves in Perdido Key and downtown Pensacola are scheduled to be completed in FY 2021.
- Pensacola Beach Influent Manhole Replacement The main influent manhole at the Pensacola Beach Wastewater Treatment Plant receives every drop of wastewater collected on Pensacola Beach before it is routed through the plant. The liner has failed, which has allowed significant corrosion of the concrete manhole, rendering it now structurally unstable. A project to replace this manhole is 50% through the design phase. Construction is scheduled to be completed by March 2021 at a total cost of \$400,000.
- Warrington Sand Drying Beds A project to upgrade the sand drying beds at the Warrington facility is under way. The survey has been completed and the project is currently in the design phase. Construction is scheduled to begin in FY 2021 at a total project cost of \$500,000.
- Transmission Main Interruption Response Plan A detailed emergency response plan was devised to allow a swift and effective response in the event of a failure of the transmission main that carries flows to our Central Water Reclamation Facility. Materials are in ECUA's possession and contracts are in place for rapid delivery and installation of line stops and flow diversion piping to greatly reduce the volume of wastewater spillage in the event of a failure. The total material cost was approximately \$400,000.
- Via De Luna Valve Replacement Regional Services installed one 16-inch valve insertion to replace one of four 16-inch horizontal gate valves that have failed on Via De Luna Drive. These are critical components required to isolate portions of the water main in order to perform emergency repairs in a safe and timely manner. An additional 16-inch gate valve will be installed in FY 2021 at a total project cost of \$70,000.
- Rolling Hills Central Transmission Main Restoration The critical 42-inch wastewater transmission main through the Rolling Hills Landfill was undermined and exposed as a result of catastrophic flooding in 2014. A stabilization project to secure the force main and mitigate future damage from severe runoff was publicly bid and has been awarded. Construction is scheduled to be complete in FY 2021 at a total project cost of \$700,000.

- Pensacola Beach Wastewater Treatment Plant LS#2 Replacement The rehabilitation of Lift Station 2, the installation of automated flow diversion equipment, and the installation of variable frequency drives for the blowers at Treatment Plant 1 were completed for a total project cost of \$890,000.
- Clubbs Street Water and Sewer Upgrade This project, completed in FY 2020 was designed to replace and upgrade the water supply and sewage collection system on Clubbs Street, which was old and in poor condition. A six-inch water main extension and an 8-inch gravity sewer main extension were completed at a combined project cost of nearly \$200,000.
- The final design is complete for bypass piping and automated flow diversion equipment to allow excess flow to bypass the chlorine contact chamber at the Central Water Reclamation Facility and be stored in the emergency storage tanks for future treatment in the event of a catastrophic flooding event. FEMA formally awarded grant funding for this project in September 2020. Construction is scheduled to be completed in FY 2021 at a total project cost of \$1,250,000.
- Bob Sikes Bridge Pig Launch The storm surge from Hurricane Sally eroded the area around a 24-inch pig (swab) launch station located on the north side of the Bob Sikes Bridge. This launch station is used to clean the water main under Santa Rosa Sound. The corroded existing valves and fittings were removed and replaced for a total project cost of \$100,000.

EXECUTIVE STAFF

EXEMPLARY EMPLOYEES



Randy Rudd, BS/CISWM Deputy Executive Director Shared Services



Don Palmer, PEDeputy Executive Director of
Engineering & Environmental
Services



Gerry Piscopo, BSME Deputy Executive Director of Maintenance & Construction



Gabe Brown, BSOL Director of Customer Services



John Daane, MBA Director of Information Technology



Tom Dawson, Jr., PE Director of Water Production



Tim Haag, MPADirector of Government
Affairs – Retired 6/2020



Stacy Hayden, PEDirector of Engineering



Brian Reid, PE Director of Regional Services



Kimberly E. Scruggs, MPA, SPHR Director of Human Resources & Administrative Services



Randy Sears, MS, MSA Director of Water Reclamation



Patty Sheldon, CPA CGFO, CPFO, CPFIM Director of Finance Retired 12/31/2020



Justin Smith, CPA Director of Finance Effective 1/1/2021



Nathalie Bowers, DFM, CBC Public Information Officer



Jim Roberts
Education Programs Specialist
Three-time recipient of
Edward R. Murrow Award

GOING ABOVE AND BEYOND!

"In the aftermath of Hurricane Sally, the **Sanitation Department** was under a tremendous strain to keep up with the enormous volume of garbage being placed at the curb, and doing so while still navigating delays due to utilities in the right-of-way and long lines at the Perdido Landfill. Between September 21 and September 26, our sanitation trucks collected 3,745.49 tons of garbage in Escambia County, and 2,224.63 tons of garbage the previous week. For comparison, crews collected 1,576.76 tons of garbage during the week before Hurricane Sally. Every one of our Sanitation staff members has done an outstanding job!"

Randy Rudd, Deputy Executive Director of Shared Services

"We received a compliment via a posting on Facebook for outstanding customer service by **Paul Lawrence**, Utility Service Technician Trainee. Mr. Lawrence responded to a call to investigate a possible leaking water meter. He determined that the leak was coming from the owner's irrigation system, explained the problem to the homeowner, and went the extra mile to find the private valve in her irrigation system to effectively stop the leak until it could be serviced by her plumber. The homeowner was very pleased with the extra effort and time Mr. Lawrence provided her."

— Bruce Woody, ECUA Executive Director

There is nothing better than an employee doing the right thing, especially when they think nobody is looking.

"A call came in yesterday to Human Resources from a customer on Randolph Street, to share a compliment for one of ECUA's field crews. This customer wanted to let us know that for the last three days, this crew had been working in front of her house and she was so impressed with their professionalism, politeness, and how nice and how sweet they had been! Our customer said they worked in the rain, in the heat, and even after dark. She got their names and told them she was going to make a call to ECUA. They are: Will Parker, Bentley Jones, Ty Gweshe, and Ron Brown. Congratulations to the group!"

— Frances Webb, Sr. HR Generalist

"ECUA issued a system-wide Precautionary Boil Water Notice (PBWN) following Hurricane Sally, while our crews repaired broken mains and secured our water distribution system. In order to lift the PBWN, bacteriologic samples must be taken and analyzed to assure that our drinking water is free of contamination. Normally, sampling regulations require the drawing of two independent samples, pulled at least six hours apart on two separate days. Following a hurricane event, our system typically experiences dozens upon dozens of breaks and sampling at each break location would normally take weeks. Ever resourceful, our staff sought a solution to the sampling process that would assure product quality, maintain regulatory protocols while allowing for a speedier lifting of the PBWN. With approval from our partners at FDEP, our sampling teams achieved in 72 hours what would normally be accomplished over the course of one month, and we were able to lift the system-wide PBWN in just four days!" -Randy Sears, Director of Water Reclamation

"As I was leaving the office yesterday evening, I saw a disabled car in the median on Copter Road with three people attempting to change a tire. About that time, an ECUA truck pulled up and Cordaria "Montel" Griffin exited his vehicle to assist. This morning when I called Montel to acknowledge and thank him, he told me that a young lady had a flat tire and another couple had stopped to help her. However, this couple had trouble changing the tire so he was able to get the tire changed and help the young lady get on her way. Pure awesomeness, if you ask me. Montel saw a need and stopped to help! There is nothing better than an employee doing the right thing, especially when they think nobody is looking."

- Kim Scruggs, ECUA Human Resources Director

